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MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			FIGUEROA, MARISOL	
			ART UNIT	PAPER NUMBER
			2681	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/800,172

Applicant(s)

PECEN ET AL.

Examiner

Marisol Figueroa

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) filed on March 12, 2004 has been considered.

### *Claim Objections*

2. Claims 25 and 30 are objected to because of the following informalities:

(a) On line 3 of claims 25 and 30 replace --be-- with "been". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-2, 5-7, 10-13, 16-17, and 20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Johannesson et al. US 2002/0119774 A1**.

**Regarding claim 1**, Johannesson discloses a method for a wireless communication device comprising: receiving a neighbor list including at least one technology type indicator the mobile station receives and determining availability of technology based on the neighbor list (P.0006, lines 3-8; P.0015, lines 1-10, 21-25; P.0018, lines 4-13; a mobile station receives a neighbor list containing

Art Unit: 2681

PLMN neighboring the PLMN presently serving the mobile station for determining a better PLMN available).

**Regarding claim 2**, Johannesson discloses the method of claim 1, wherein determining availability of technology includes determining availability of technology associated with a network on which the wireless communication device is currently registered or directed to register based on a priority level for a given network (P.0017, lines 1-5; P.0018, lines 4-10; the mobile station determines an better available PLMN network based on a criteria that may include a user preferred PLMN, an operator preferred PLMN, the home PLMN, etc.).

**Regarding claim 5**, Johannesson discloses the method of claim 1, further comprising accessing a technology type based on the availability of technology (P.0018, lines 20-24).

**Regarding claim 6**, Johannesson discloses the method of claim 5, further comprising registering with a Public Land Mobile Network (PLMN) in response to determining availability of at least one radio access technology associated with the PLMN (P.0018, lines 20-24; note that it is inherent that registration is inherent when the mobile station switches to a new PLMN).

**Regarding claim 7**, Johannesson discloses the method of claim 1, further comprising selecting a scanning process based on the availability of technology (P.0018, lines 10-13, 20-24).

**Regarding claim 10**, Johannesson discloses the method of claim 1, further comprising storing the neighbor list in the wireless communication device (Figure 2, PMLN Neighbor List 30 in the MS 10).

**Regarding claim 11**, Johannesson discloses a wireless communication device comprising: a transceiver configured to receive a neighbor list from a remote source (P.0017, lines 5-7; P.0015, lines 3-8; transceiver circuitry 34), the neighbor list including at least one technology type indicator (P.0015, lines 8-10, 21-25).

**Regarding claim 12**, Johannesson discloses the wireless communication device of claim 11, further comprising a processor configured to determine availability of technology based on the neighbor list (P.0017, lines 1-5; inherently the mobile station includes a processor for processing the information within the PLMN neighbor list to determine the availability to select a preferred network).

**Regarding claim 13**, Johannesson discloses the wireless communication device of claim 12, wherein the processor determines availability of technology associated with a network on which the wireless communication device is currently registered or directed to register based on a priority level for a given network (P.0017, lines 1-5; P.0018, lines 4-10; the mobile station determines an better available PLMN network based on a criteria that may include a user preferred PLMN, an operator preferred PLMN, the home PLMN, etc.).

**Regarding claim 16**, Johannesson discloses the wireless communication device of claim 12, wherein the transceiver registers with a Public Land Mobile Network (PLMN) in response to determining availability of at least one radio access technology associated with the PLMN (P.0018, lines 20-24; note that it is inherent that registration is inherent when the mobile station switches to a new PLMN).

**Regarding claim 17**, Johannesson discloses the wireless communication device of claim 12, wherein the processor selects a scanning process based on the availability of technology (P.0018, lines 10-13, 20-24).

**Regarding claim 20**, Johannesson discloses the wireless communication device of claim 11, further comprising a memory configured to store the neighbor list (Figure 2, PMLN Neighbor List 30 in the MS 10).

5. **Claims 1-2, 4-5, 9-13, 15, 19, and 20** are rejected under 35 U.S.C. 102(e) as being anticipated by **Buckley et al. US 2005/0148332 A1**.

**Regarding claim 1**, Buckley discloses a method for a wireless communication device comprising: receiving a neighbor list including at least one technology type indicator (P.0018; P.0019; P.0020, lines 1-4; a list of prioritized networks through which a mobile node, i.e. wireless communication device, can communicate is provided, i.e. received, to/at the mobile node containing identifiers that identify the networks); determining availability of technology based on the neighbor list (P.0020, lines 4-17).

**Regarding claim 2**, Buckley discloses the method of claim 1, wherein determining availability of technology includes determining availability of technology associated with a network on which the wireless communication device is currently registered or directed to register based on a priority level for a given network (P.0019, lines 5-11; P.0020; a determination is made of the availability of WLANs or other radio networks comparing the available network with networks identified on a first list which are the preferred, i.e. priority, networks to communicate).

**Regarding claim 4**, Buckley discloses the method of claim 1, wherein determining availability of technology includes determining availability of at least one radio access technology of a wireless local area network (P.0019, lines 1-5; P.0020, lines 4-8; a determination is made of the availability of WLANs at the position at which the mobile node is located).

**Regarding claim 5**, Buckley discloses the method of claim 1, further comprising accessing a technology type based on the availability of technology (P.0020, lines 4-11; P.0026; the mobile node attempts communication, i.e. access, with the available network).

**Regarding claim 9**, Buckley discloses the method of claim 1, wherein receiving a neighbor list including at least one technology type indicator includes receiving the neighbor list including a

first radio access technology for cellular-based communication and a second radio access technology for wireless local area network communication (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks that the mobile node can attempt to communicate with, and contains identifiers which identify a home network, i.e. cellular network, and WLAN networks).

**Regarding claim 10**, Buckley discloses the method of claim 1, further comprising storing the neighbor list in the wireless communication device (P.0024, lines 1-3; P.0040, lines 1-16; the mobile node includes a storage element 36 that defines a plurality of storage entities 38 to store the listing of available networks).

**Regarding claim 11**, Buckley discloses a wireless communication device comprising: a transceiver configured to receive a neighbor list from a remote source (P.0040, lines 1-3; P.0018; P.0019; P.0020, lines 1-4; P.0051; the listing of networks is downloaded by the network), the neighbor list including at least one technology type indicator (P.0018; P.0019; P.0020, lines 1-4; the listing contains identifiers that identifies the networks with which the mobile node is permitted to attempt to communicate).

**Regarding claim 12**, Buckley discloses the wireless communication device of claim 11, further comprising a processor configured to determine availability of technology based on the neighbor list (P.0020, lines 4-17; P.0041; determiner 48).

**Regarding claim 13**, Buckley discloses the wireless communication device of claim 12, wherein the processor determines availability of technology associated with a network on which the wireless communication device is currently registered or directed to register based on a priority level for a given network (P.0020, lines 4-17; P.0041; P.0019, lines 5-11; P.0020; the determiner 48 makes a determination of the availability of WLANs or other radio networks comparing the available

network with networks identified on a first list which are the preferred, i.e. priority, networks to communicate).

**Regarding claim 15**, Buckley discloses the wireless communication device of claim 12, wherein the processor determines availability of at least one radio access technology of a wireless local area network (P.0020, lines 4-17; P.0041; the determiner 48 determines the availability of available networks by monitoring channels upon which wireless local area networks broadcast identifying signals).

**Regarding claim 19**, Buckley discloses the wireless communication device of claim 11, wherein the neighbor list includes a first radio access technology for cellular-based communication and a second radio access technology for wireless local area network communication (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks that the mobile node can attempt to communicate with, and contains identifiers which identify a home network, i.e. cellular network, and WLAN networks).

**Regarding claim 20**, Buckley discloses the wireless communication device of claim 11, further comprising a memory configured to store the neighbor list (P.0024, lines 1-3; P.0040, lines 1-16; the mobile node includes a storage element 36 that defines a plurality of storage entities 38 to store the listing of available networks).

6. **Claims 21-23, and 26-28** are rejected under 35 U.S.C. 102(b) as being anticipated by **Blanc et al.** US 2004/0092259.

**Regarding claim 21**, Blanc discloses a method for a wireless communication network comprising: inserting network identification and technology type to a neighbor list; and providing the neighbor list to a remote device (P.0057-0058; P.0059, lines 1-5; P.0063; a list of neighboring



cells is drawn to sent to the mobile station that indicates the network identifier and the type of radio access technology used in the cell).

**Regarding claim 22**, Blanc discloses the method of claim 21, further comprising determining whether a home network of the remote device is associated with at least two technology types (P.0070-0080, lines 1-5; the authorized networks, i.e. technology, for the user equipment, i.e. remote device, is determined for drawing up an optimized list of neighboring cells).

**Regarding claim 23**, Blanc discloses the method of claim 22, wherein inserting network identification and technology type to a neighbor list occurs in response to determining that the home network of the remote device is associated with at least two technology types (P.0070-0073; P.0080, lines 1-5; the optimized list of neighboring cells is created with information about the authorized networks for the user equipment in which the type of service and/or technology authorized for the UE is indicated and also identified by their network ID).

**Regarding claim 26**, Blanc discloses a wireless communication network comprising: a server configured to insert network identification and technology type to a neighbor list (P.0057-0058; P.0059, lines 1-5; P.0063; the access network, i.e. server, creates a list of neighboring cells to sent to the mobile station that indicates the network identifier and the type of radio access technology used in the cell); and a base station, communicating with the server, configured to provide the neighbor list to a remote device (P.0059, lines 1-2; it is inherent since the access network communicates information to a mobile station through the base station).

**Regarding claim 27**, Blanc discloses the wireless communication network of claim 26, wherein the server determines whether a home network of the remote device is associated with at least two technology types (P.0070-0080, lines 1-5; the authorized networks, i.e. technology, for the user equipment, i.e. remote device, is determined for drawing up an optimized list of neighboring

cells).

**Regarding claim 28**, Blanc discloses the wireless communication network of claim 27, wherein the server inserts the network identification and the technology type to the neighbor list in response to determining that the home network of the remote device is associated with at least two technology types (P.0070-0073; P.0080, lines 1-5; the optimized list of neighboring cells is created with information about the authorized networks for the user equipment in which the type of service and/or technology authorized for the UE is indicated and also identified by their network ID).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 3, 8, 14, and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Buckley et al.** in view of **Balachandran et al. US 2004/0259546 A1**.

**Regarding claim 3**, Buckley discloses the method of claim 1, wherein determining availability of technology includes determining availability of at least one radio access technology of a cellular network (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks with their respective identifiers which identify a home network, i.e. cellular network, and WLAN networks, with which the mobile node can communicate when available). However fails to disclose wherein the cellular network is a wideband cellular network. Balachandran teaches that Global System of Mobile Communications (GSM) and Wideband Code Division

Multiple Access (WCDMA) cellular networks are well known in the art (P.0002, lines 1-4). Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the availability of a wideband cellular network because this network is well known and conventionally use to provide service to wireless telephones.

**Regarding claim 14**, Buckley discloses the wireless communication device of claim 12, wherein the processor determines availability of at least one radio access technology of a cellular network (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks with their respective identifiers which identify a home network, i.e. cellular network, and WLAN networks, with which the mobile node can communicate when available). However fails to disclose wherein the cellular network is a wideband cellular network. Balachandran teaches that Global System of Mobile Communications (GSM) and Wideband Code Division Multiple Access (WCDMA) cellular networks are well known in the art (P.0002, lines 1-4). Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the availability of a wideband cellular network because this network is well known and conventionally use to provide service to wireless telephones.

**Regarding claim 8**, Buckley discloses the method of claim 1, wherein receiving a neighbor list including at least one technology type indicator includes receiving the neighbor list including a first radio access technology and a second radio access technology (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks with their respective identifiers which identify a home network, i.e. first access technology, and WLAN networks, i.e. second access technology). Buckley fails to disclose wherein the second technology has a wider bandwidth capability than the first radio access technology. Balachandran teaches that wireless local area networks provide coverage over small local areas, typically with higher bandwidth than cellular

Art Unit: 2681

network and therefore a user may find desirable to use a WLAN connection whenever high bandwidth capabilities are required (P.0002-0003). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to recognize that a second access technology, e.g. WLAN, has a wider bandwidth as taught by Balachandran, because typically WLAN systems provide higher bandwidth capability than cellular networks.

**Regarding claim 18**, Buckley discloses the wireless communication device of claim 11, wherein the neighbor list includes a first radio access technology and a second radio access technology (P.0022, lines 1-6; P.0043; a list is provided to the mobile node which includes a listing of networks with their respective identifiers which identify a home network, i.e. first access technology, and WLAN networks, i.e. second access technology). Buckley fails to disclose wherein the second technology has a wider bandwidth capability than the first radio access technology. Balachandran teaches that wireless local area networks provide coverage over small local areas, typically with higher bandwidth than cellular network and therefore a user may find desirable to use a WLAN connection whenever high bandwidth capabilities are required (P.0002-0003). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to recognize that a second access technology, e.g. WLAN, has a wider bandwidth as taught by Balachandran, because typically WLAN systems provide higher bandwidth capability than cellular networks.

9. **Claims 24, 25, 29, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Blanc et al.**

**Regarding claim 24**, Blanc discloses the method of claim 22, but fails to disclose wherein determining whether a home network of the remote device is associated with at least two technology types occurs after determining that a usable neighbor list has not been provided to the remote

device. However, it would be common sense to determine the technology types a remote device is authorized to access in order to provide an optimized list of the neighboring cells. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the technology types the home network of a remote device is operable after determining a usable neighbor list has not been provided in order for the remote device to avoid the misuse of signaling resources in trying to communicate with networks in which is not authorized to communicate (P.0012).

**Regarding claim 25,** Blanc discloses the method of claim 21, but fails to disclose wherein inserting network identification and technology type to a neighbor list occurs after determining that a usable neighbor list has not been provided to the remote device. However, it would be common sense to determine the technology types a remote device is authorized to access in order to provide an optimized list of the neighboring cells. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the technology types the home network of a remote device is operable after determining a usable neighbor list has not been provided in order for the remote device to avoid the misuse of signaling resources in trying to communicate with networks in which is not authorized to communicate (P.0012).

**Regarding claim 29,** Blanc discloses the wireless communication network of claim 27, but fails to disclose wherein the server determines whether a home network of the remote device is associated with at least two technology types occurs after determining that a usable neighbor list has not been provided to the remote device. However, it would be common sense to determine the technology types a remote device is authorized to access in order to provide an optimized list of the neighboring cells. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the technology types the home network of a remote device is operable

Art Unit: 2681

after determining a usable neighbor list has not been provided in order for the remote device to avoid the misuse of signaling resources in trying to communicate with networks in which is not authorized to communicate (P.0012).

**Regarding claim 30**, Blanc discloses the wireless communication network of claim 26, but fails to disclose wherein the server inserts the network identification and technology type to a neighbor list occurs after determining that a usable neighbor list has not been provided to the remote device. However, it would be common sense to determine the technology types a remote device is authorized to access in order to provide an optimized list of the neighboring cells. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to determine the technology types the home network of a remote device is operable after determining a usable neighbor list has not been provided in order for the remote device to avoid the misuse of signaling resources in trying to communicate with networks in which is not authorized to communicate (P.0012).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Marisol Figueroa  
Art Unit 2681

  
ERIKA A. CARY  
PRIMARY EXAMINER